



DEPARTMENT OF TOXIC SUBSTANCES CONTROL

SUPPLEMENTAL SAMPLING UPDATE
JUNE 27, 2006

CENTEX HOMES
STERLING HOMES DEVELOPMENT

DEPARTMENT OF TOXIC SUBSTANCES CONTROL (DTSC)

DTSC is:

- ☐ A department within California Environmental Protection Agency (Cal/EPA)
- ☐ Charged with protecting public health and the environment from harmful exposure to hazardous substances/wastes
- ☐ Responsible for regulating hazardous waste generation, transportation, treatment, storage and disposal in California.

DTSC (Continued....)

- ❑ Has multidisciplinary technical expertise on staff - engineers, environmental scientists, toxicologists, geologists, environmental planners, public participation specialists, and a variety of other technical experts.

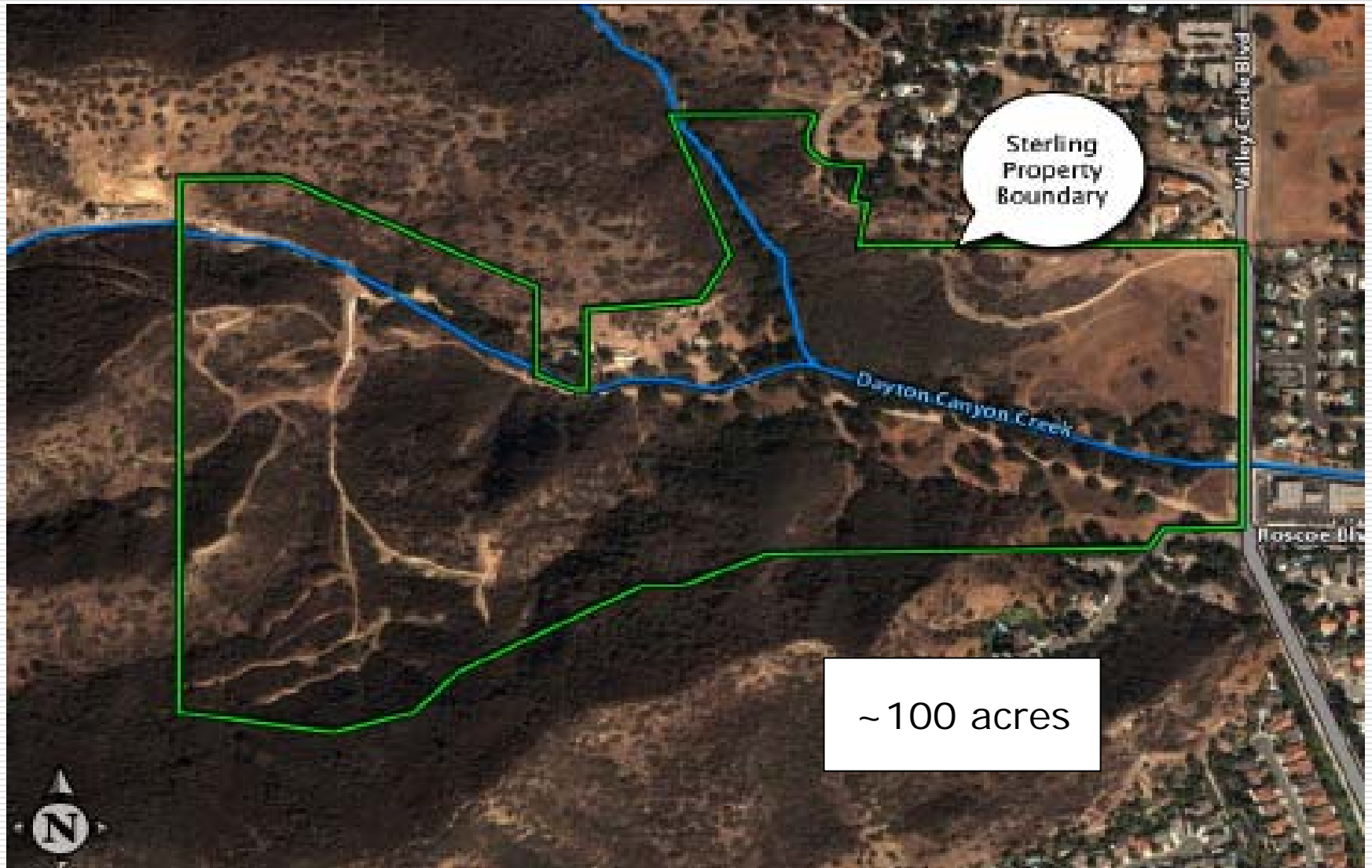
DTSC'S Site Mitigation Program:

- ❑ Is responsible for overseeing cleanup activities at sites to address public health and environmental threats posed by the site.
- ❑ Identifies, assesses, and carries out or oversees removal or remedial actions at sites where uncontrolled releases have occurred or potential releases of hazardous substances may occur.
- ❑ Has several programs to facilitate assessment and cleanup of properties.

Voluntary Cleanup Program

- ❑ California Health & Safety Code, Section 25355.5(a)(1)(C) created the Voluntary Cleanup Program.
- ❑ Authorizes DTSC to enter into agreements with Proponents to oversee characterization and cleanup of a site.
- ❑ Under the Voluntary Cleanup Agreement (VCA) between DTSC & Centex:
 - ❑ a) DTSC will oversee the site characterization and removal actions for areas of known contamination.
 - ❑ b) PEA for other areas.

Sterling Home Development



Background

- ❑ Perchlorate detected in soil samples collected in May 2005.
- ❑ Centex Homes entered into VCA with DTSC in August 2005.
Scope of the VCA included:
 - a) DTSC oversight of site characterization activities and removal actions for areas of known contamination.
 - b) PEA activities for other areas of the site
- ❑ Soil sampling conducted from September to December 2005.

Perchlorate Detections May 2005



1 CREEK AREA'S SHOWN IN TABLE 3



SOIL SAMPLE LOCATION

2-3

SOIL SAMPLE ID
(SAMPLES HIGHLIGHTED IN RED
EXCEED PRG LEVEL OF 7.8 kg/mg)



PROJECT LAYOUT

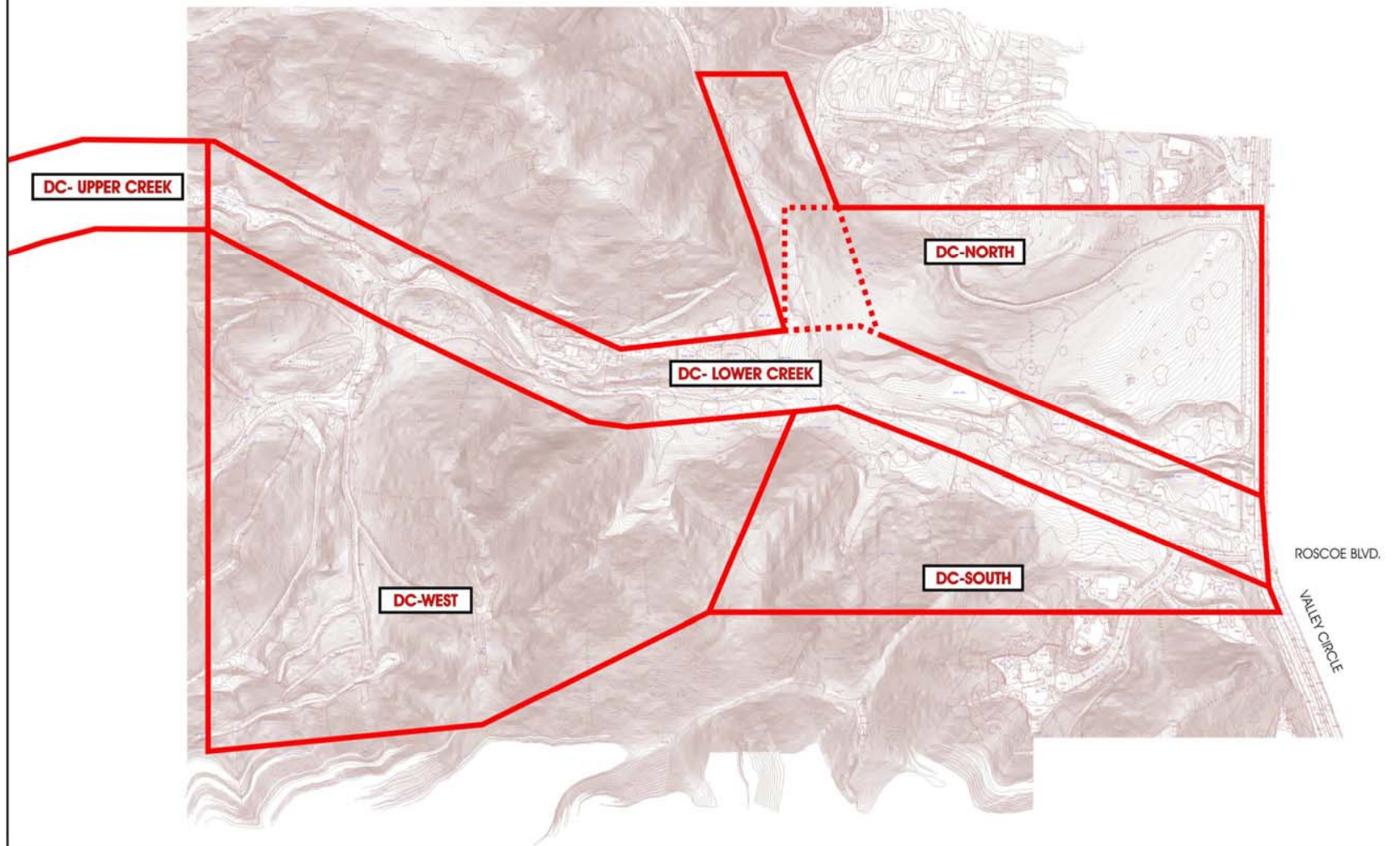
CREEK SEDIMENT SAMPLING LOCATIONS
STERLING HOMES
WEST HILLS, CA

ALLWEST REMEDIATION

JOB NO. 05 8520

DATE: JULY 2005

FIGURE NO.



MONITORING
ZONES

LEGEND

DAYTON CANYON SAMPLING AREAS
STERLING HOMES
WEST HILLS, CA

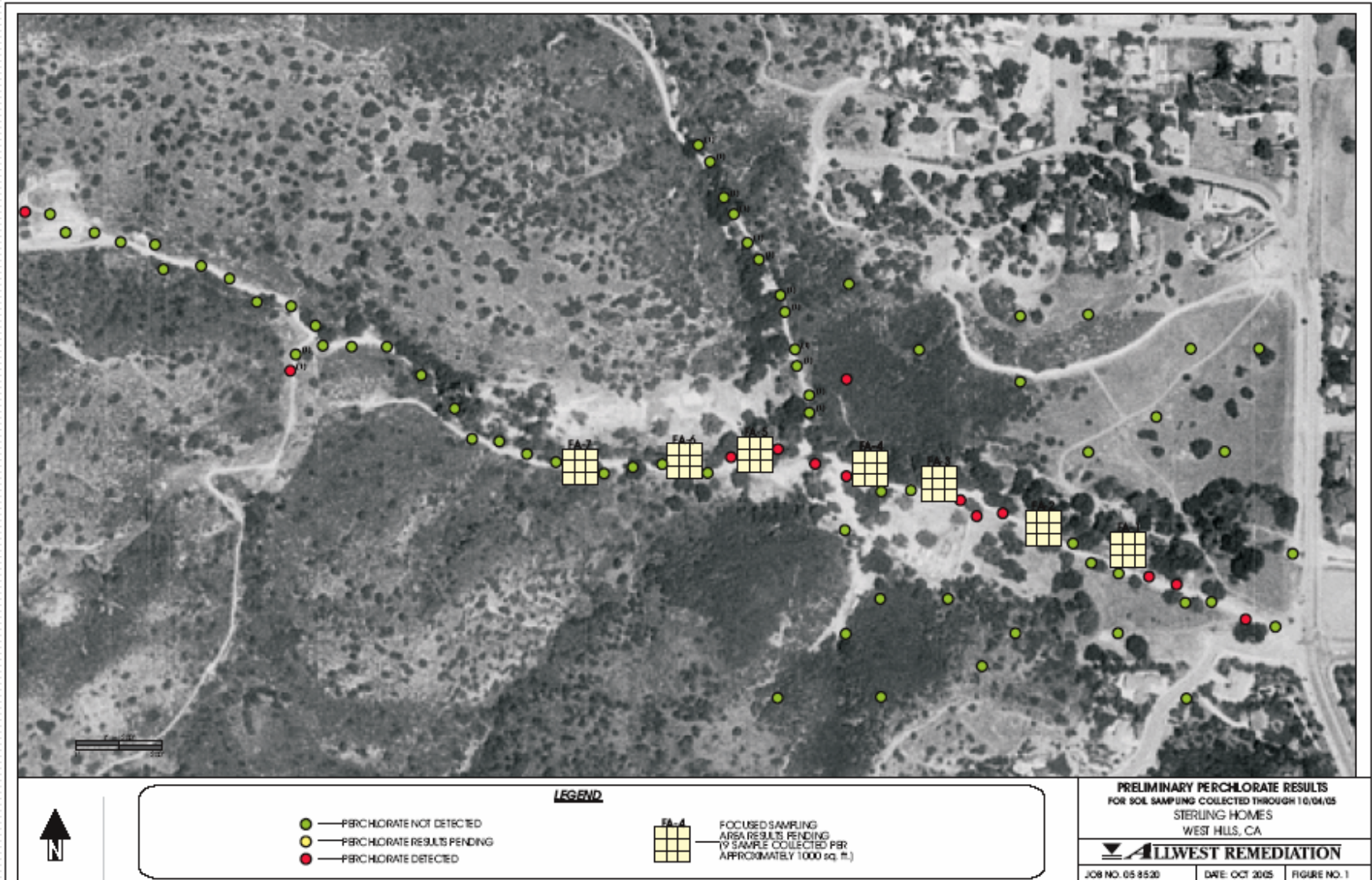
ALLWEST REMEDIATION

JOB NO. 05 8520

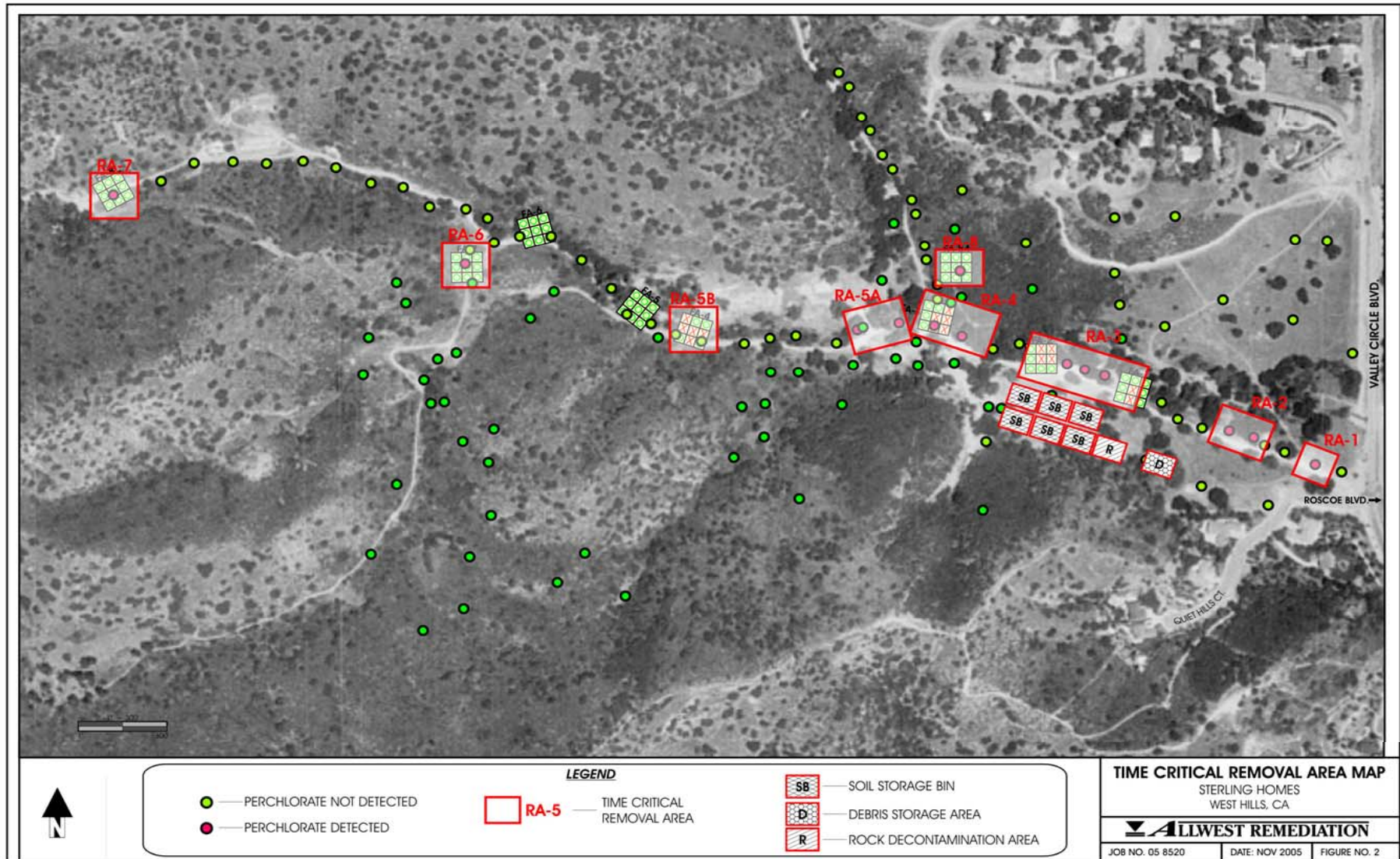
DATE: AUG 2005

FIGURE NO. 7

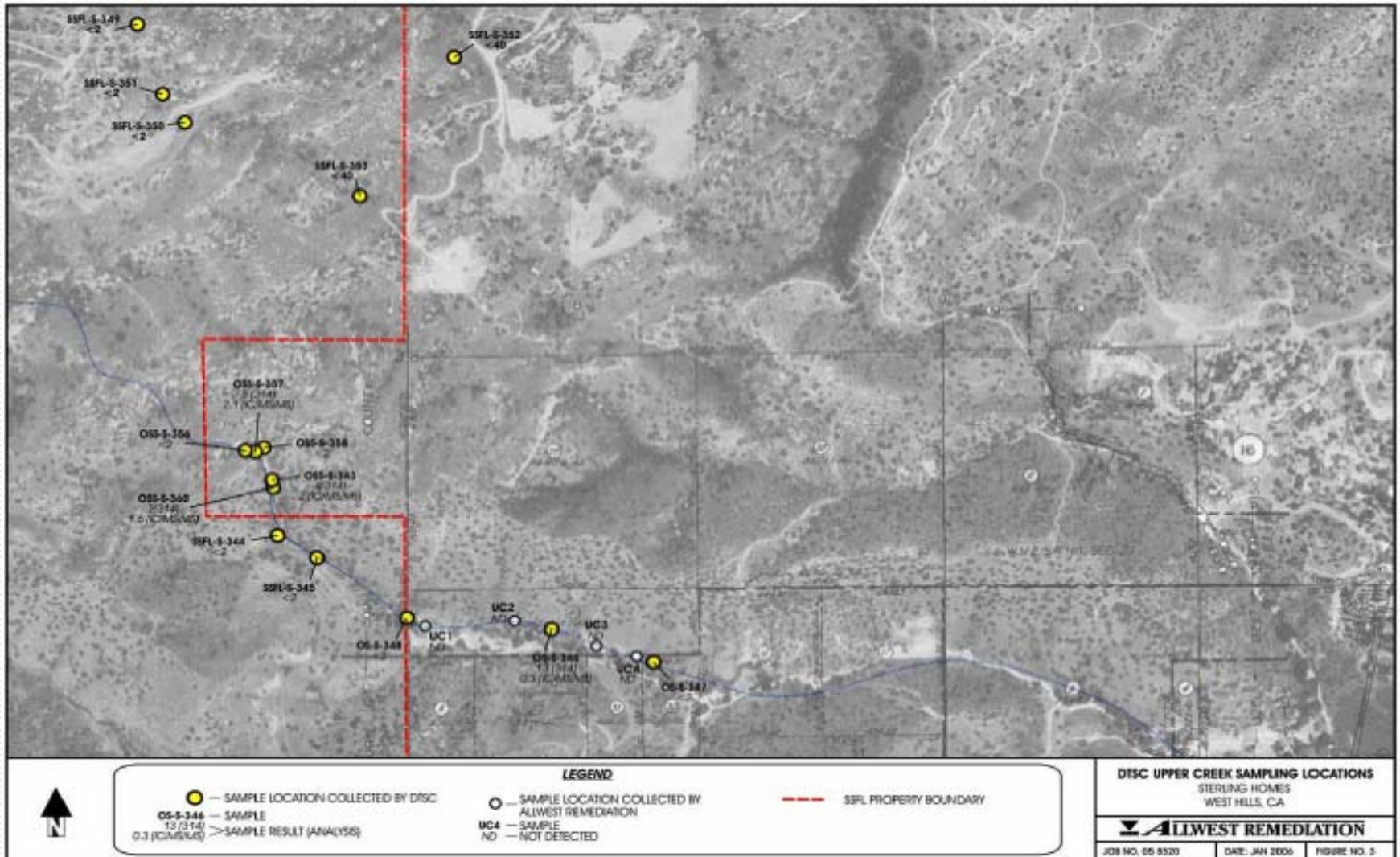
October 2005 Update



Proposed Time Critical Soil Removal Areas (December 2005)



Upper Creek Sampling Locations



2005 SAMPLING SUMMARY

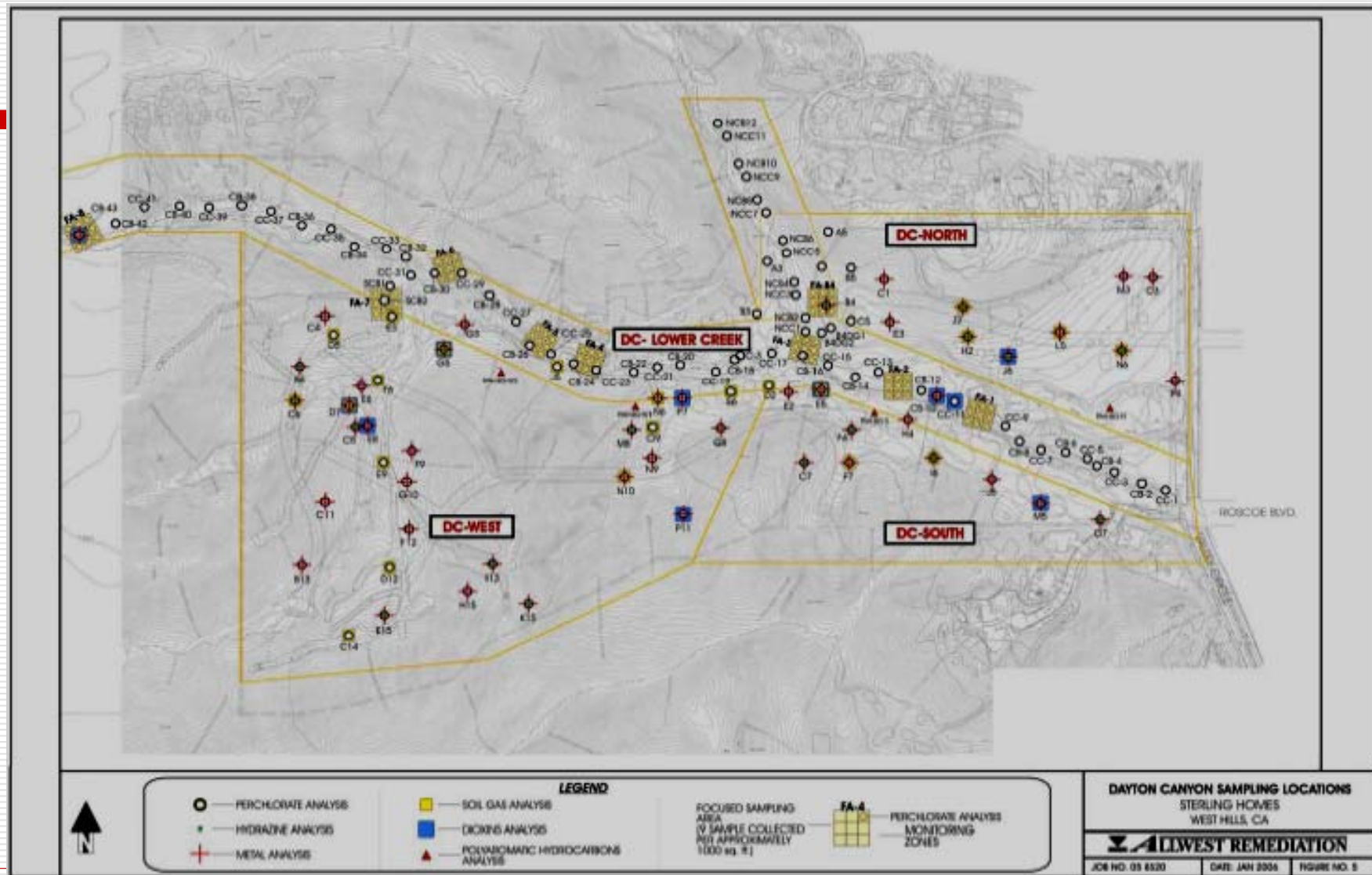
□ PERCHLORATE

- Creek area – 250 soil samples from 103 locations
- DC-N, S & W – 220 soil samples from 78 locations

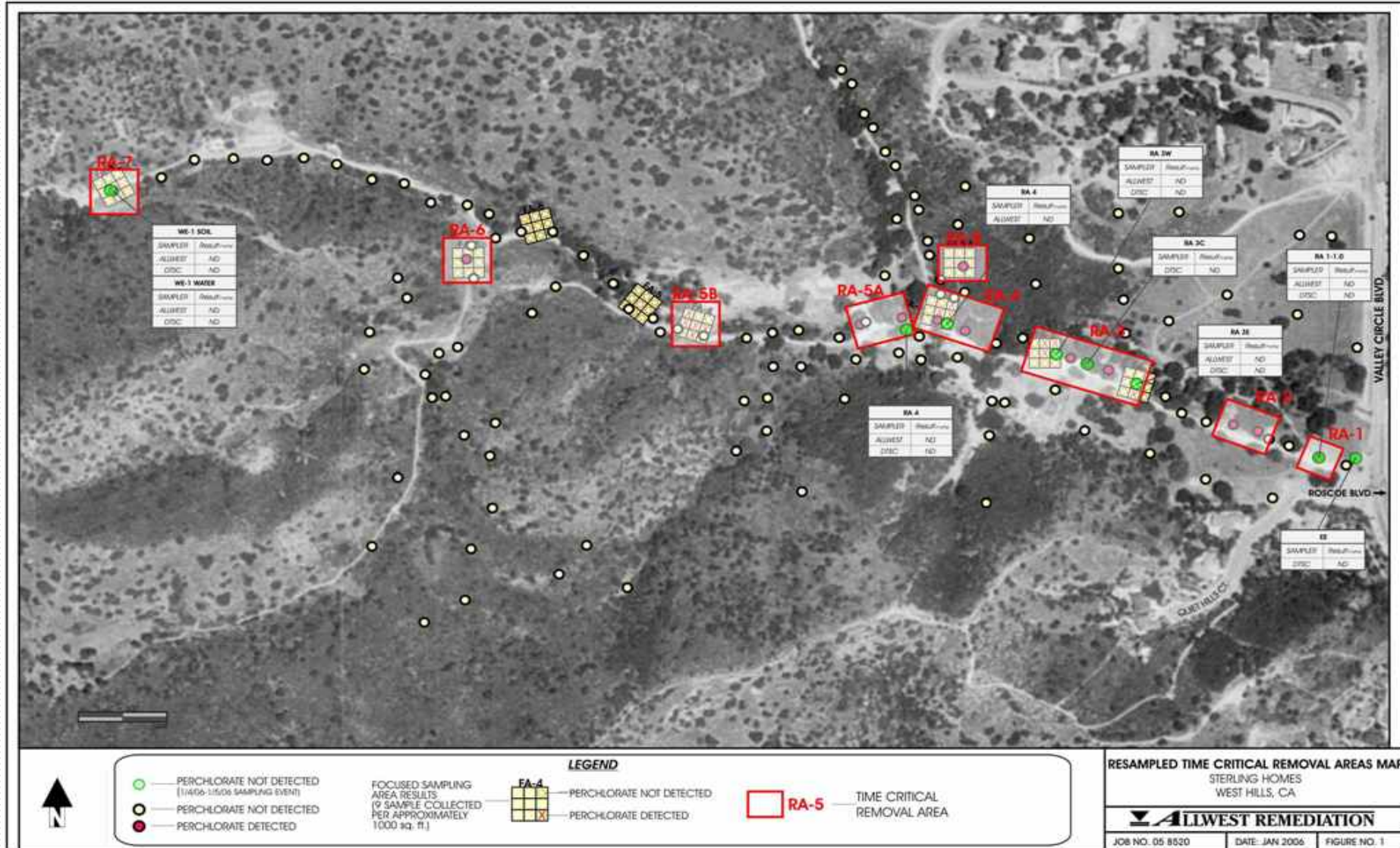
□ Sampling for other constituents included:

- Volatile Organic Compounds (TCE, PCE, Benzene) - Soil gas and soil matrix, Total Petroleum Hydrocarbons, Metals, Hydrazine, Dioxins, Semi-volatile organics (PAH) and Radiological Elements.

2005 SAMPLING SUMMARY



TIME CRITICAL REMOVAL AREAS SAMPLING JANUARY 2006



Supplemental Sampling Plan

April 2006

The Supplemental Sampling plan was developed to:

- ☐ Determine if perchlorate was still present within the proposed removal areas or had migrated downstream due to the rain.
- ☐ Evaluate if perchlorate had migrated deeper in the creek bed soils.
- ☐ Evaluate if perchlorate was present in deeper soils and in the lower canyon area.
- ☐ Determine if Perchlorate or VOCs are present in groundwater near Dayton Canyon Creek.

Supplemental Sampling Plan Results

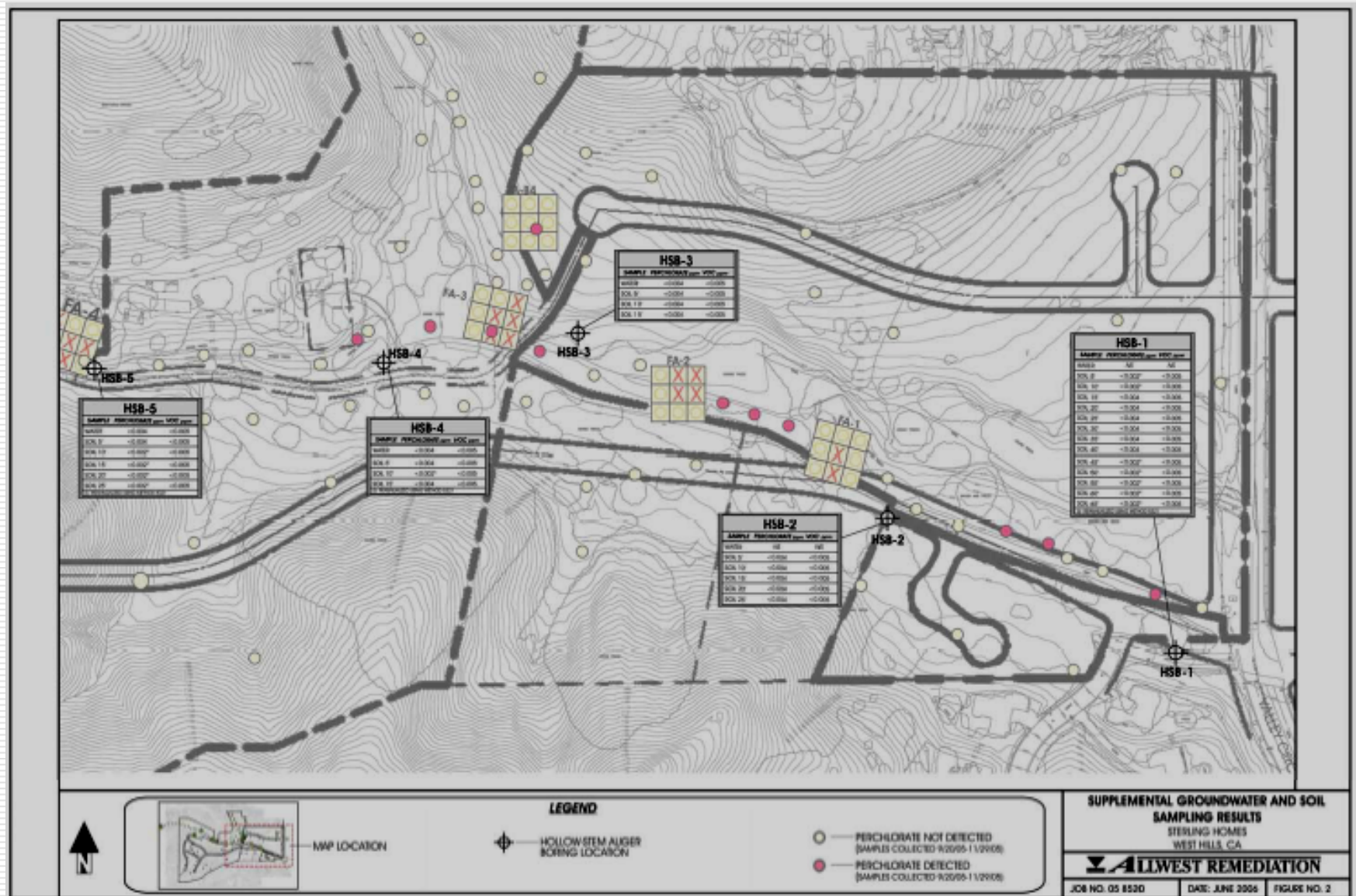
Groundwater:

- The deep well was drilled to 65 feet below ground surface (bgs). Water was encountered at 40 ft. Soil samples collected from 5 foot intervals.
- The four shallow wells adjacent to the creek were drilled to between 15 and 30 feet bgs. Three of the wells produced water for sampling . One well (HSB 2) did not produce any water. Soil samples were collected from 5 foot intervals.
- Perchlorate and VOCs were not detected.

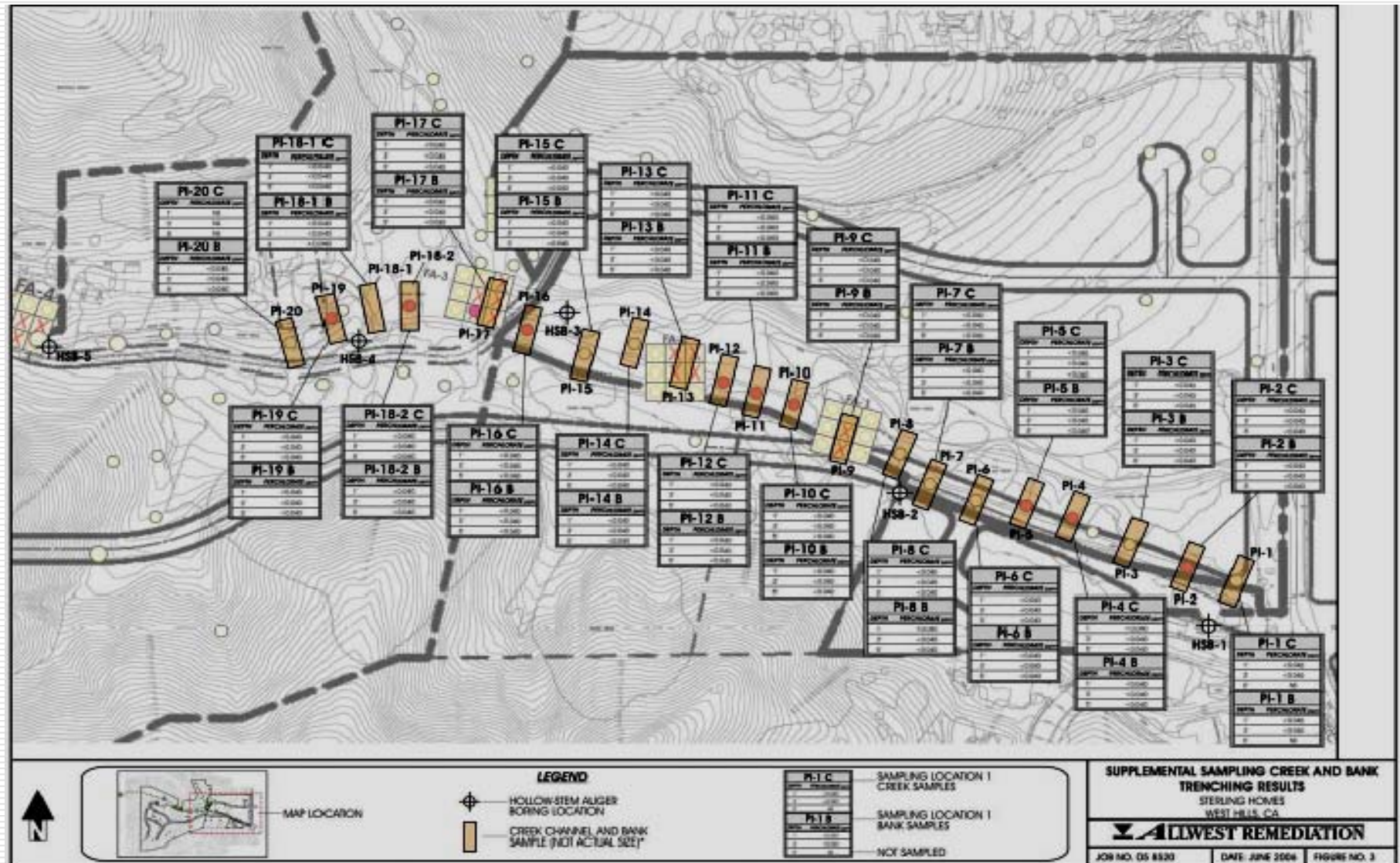
Creek and bank soils:

- 41 creek and bank locations were sampled (123 total soil samples were collected). Perchlorate was not detected in any of the samples.

Groundwater Wells Locations & Sampling Results

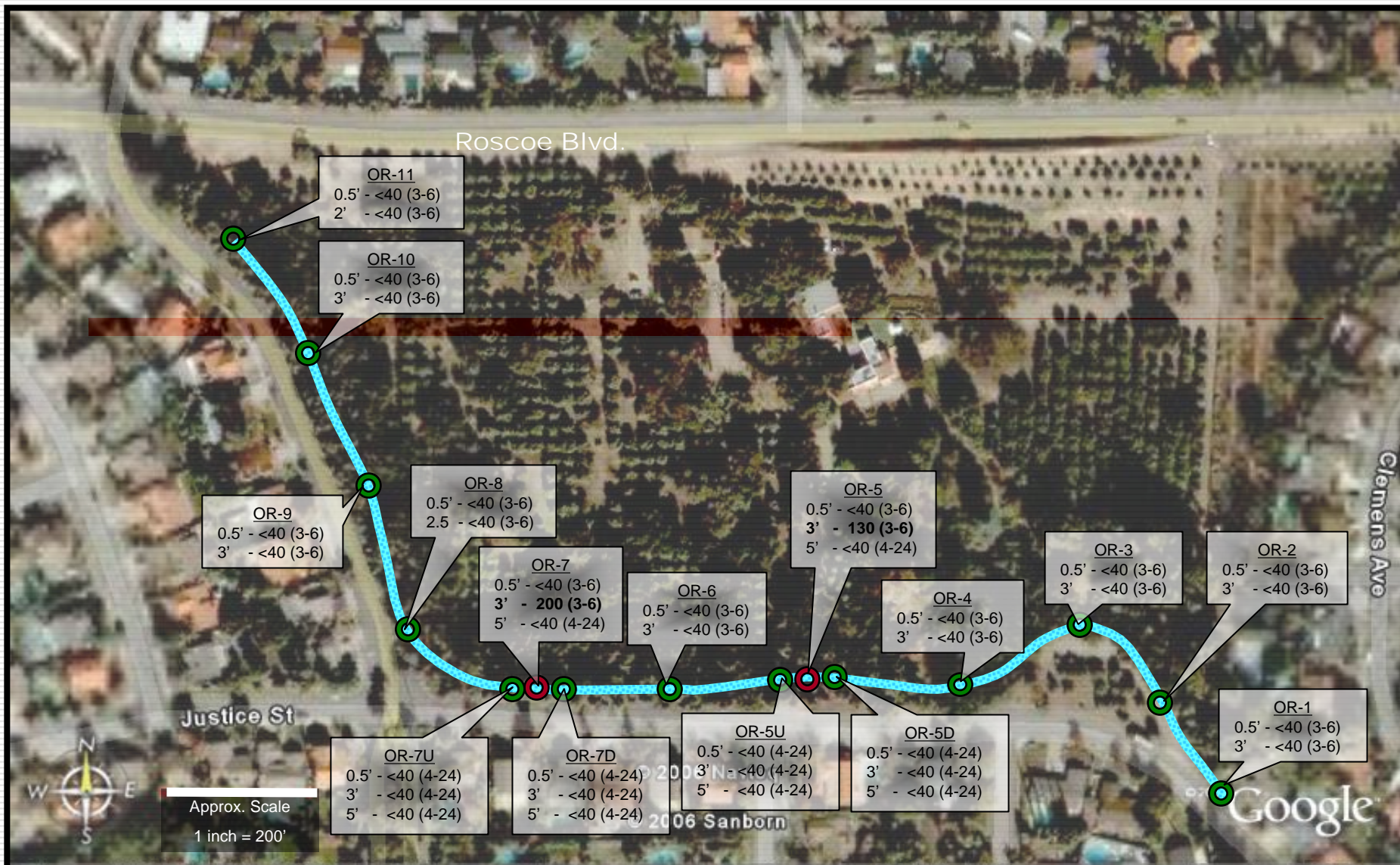


Creek and Bank Sampling Locations and Results



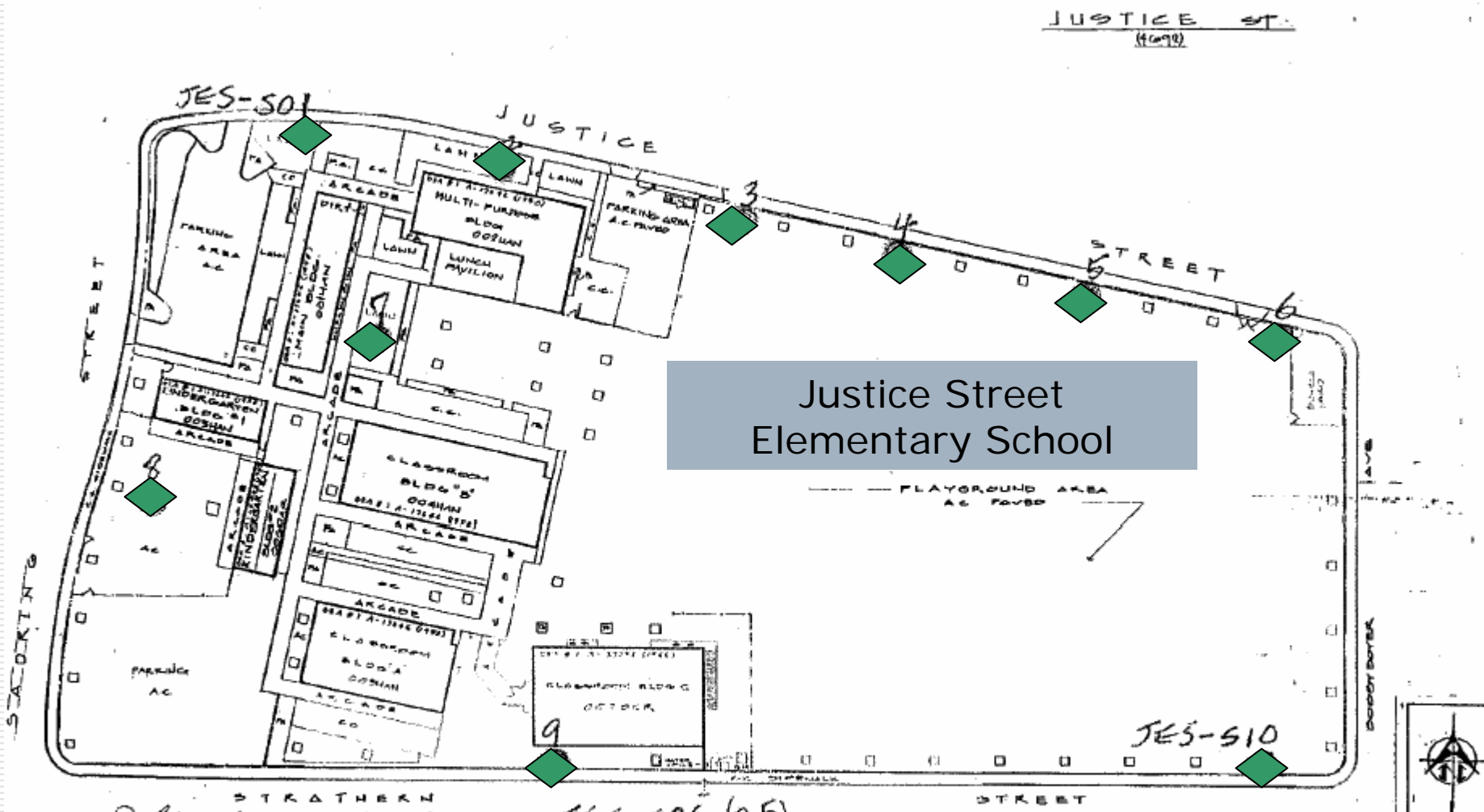
ORCUTT RANCH PARK & JUSTICE ELEMENTARY SCHOOL SOIL SAMPLING

- ☐ Soil samples collected by DTSC Staff on March 6th and April 24, 2006 at Orcutt Ranch Park.
 - 37 soil samples
- ☐ Soil Sampling at Justice Elementary School on April 10, 2006.
 - 25 soil samples collected from 10 unpaved locations (gardens, tree boxes and grassy areas)
- ☐ Perchlorate was not detected in any of the soil samples.



- Sampling Location without perchlorate detection
- Sampling Location where perchlorate was detected

Figure 1
Sampling Locations
Orcutt Ranch Limited Investigation



Justice Street
Elementary School

Sampled Locations



MAY 24 1999

LEGEND

- CENTER LINE
- PROPERTY LINE
- PAVED DRIVE
- PAVED LOT
- PAVED DRIVE
- PAVED DRIVE
- PAVED DRIVE
- PAVED DRIVE
- PAVED DRIVE
- PAVED DRIVE

DATE 05/27/99
BY 101-107

AS
RA
OR E.A.

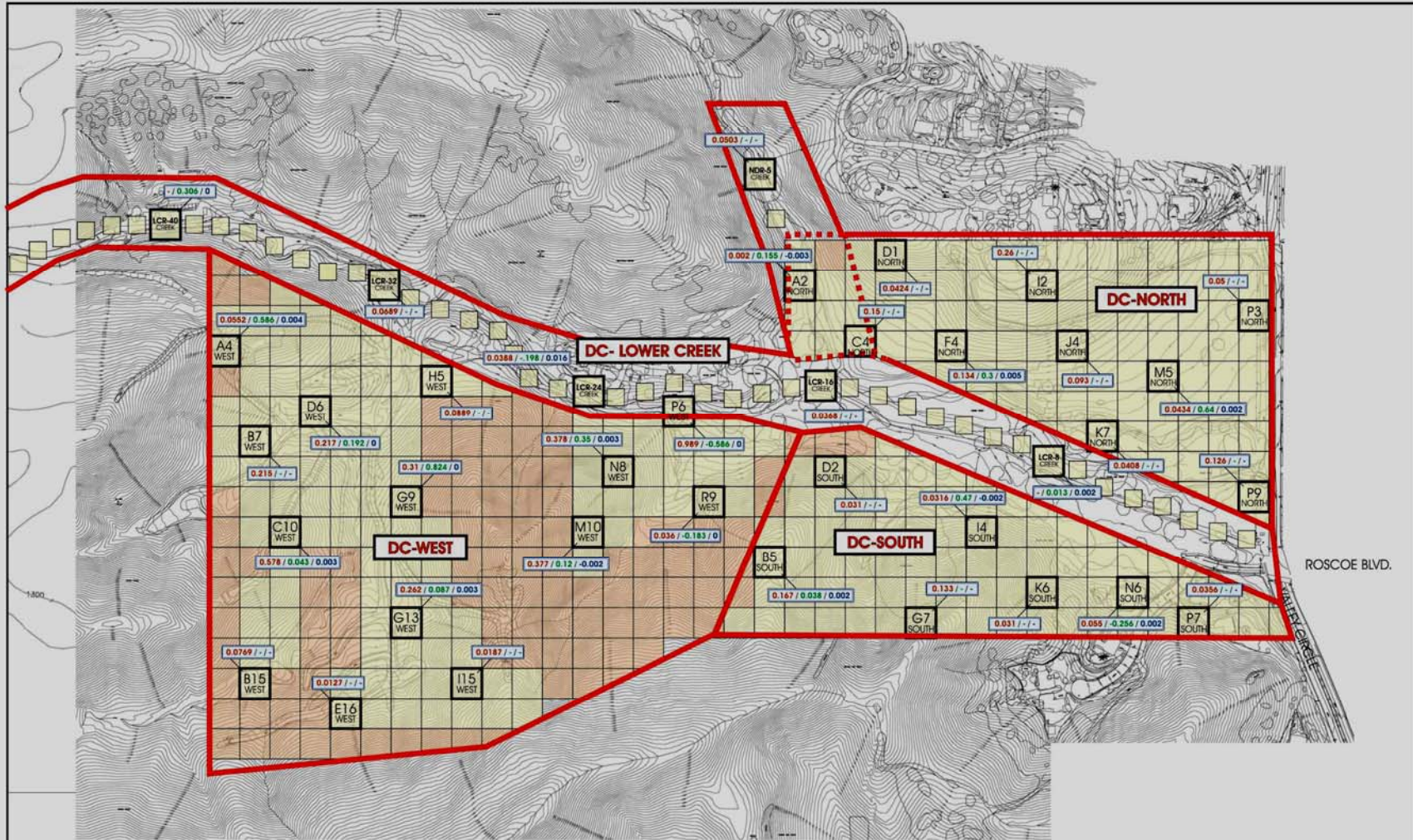
SCALE 1" = 20'
PLOT PLAN
JUSTICE STREET

Radiological Survey

Radiological Survey to determine background levels:

- ❑ Site was divided in 100 ft x 100 ft grids
- ❑ 400 grids were surveyed using portable monitoring equipment
- ❑ Soil samples were collected from 41 grids for naturally occurring and man-made radionuclides (Strontium, Cesium and Plutonium)
- ❑ Centex submitted data to DTSC on June 7, 2006 for review.

Radiological Survey



100'x100' SAMPLE GRID
AREA MONITORED

B15 WEST
SAMPLE COLLECTED

GRID NOT MONITORED
AREA NOT ACCESSIBLE

LEGEND

CS137 RESULT
Sr-90 RESULT
Pu-238 RESULT



SAMPLING AREAS

RADIOLOGICAL SURVEY RESULTS
STERLING HOMES
WEST HILLS, CA

ALLWEST REMEDIATION

JOB NO. 05 8520

DATE: JUNE 2006

FIGURE NO. 2

Drums Sampling

MATERIAL	LOCATION	PERCHLORATE (PPM)	RADIOLOGICAL SURVEY	RADIOLOGICAL LABORATORY
Drum 1	West Parcel	ND	≤ BACKGROUND	NA
Drum 2	West Parcel	ND	≤ BACKGROUND	NA
Drum 3	West Parcel	ND	≤ BACKGROUND	NA
Drum 4	West Parcel	ND	≤ BACKGROUND	NA
Drum 5	South Parcel	ND	≤ BACKGROUND	NA
Drum 6	South Parcel	ND	≤ BACKGROUND	≤ BACKGROUND
Drum 7	North Parcel	ND	≤ BACKGROUND	NA
Drum 8	West Parcel	ND	≤ BACKGROUND	NA
Drum 9	West Parcel	ND	≤ BACKGROUND	NA
Concrete Debris	West Parcel	ND	≤ BACKGROUND	≤ BACKGROUND
Concrete Debris	West Parcel	ND	≤ BACKGROUND	≤ BACKGROUND
Metal Debris	South Parcel	NA	≤ BACKGROUND	NA
Metal Debris	South Parcel	NA	≤ BACKGROUND	NA
Bricks	South Parcel	NA	≤ BACKGROUND	NA

NEXT STEPS

- ❑ DTSC will complete review of Radiological Survey data
- ❑ Centex to submit Site Characterization and PEA Report for DTSC review.
- ❑ Centex to submit Comprehensive Monitoring Plan for DTSC review. Plan to be implemented during soil grading activities.
- ❑ All documents will be posted on Envirostor for review.

DTSC CONTACT INFORMATION

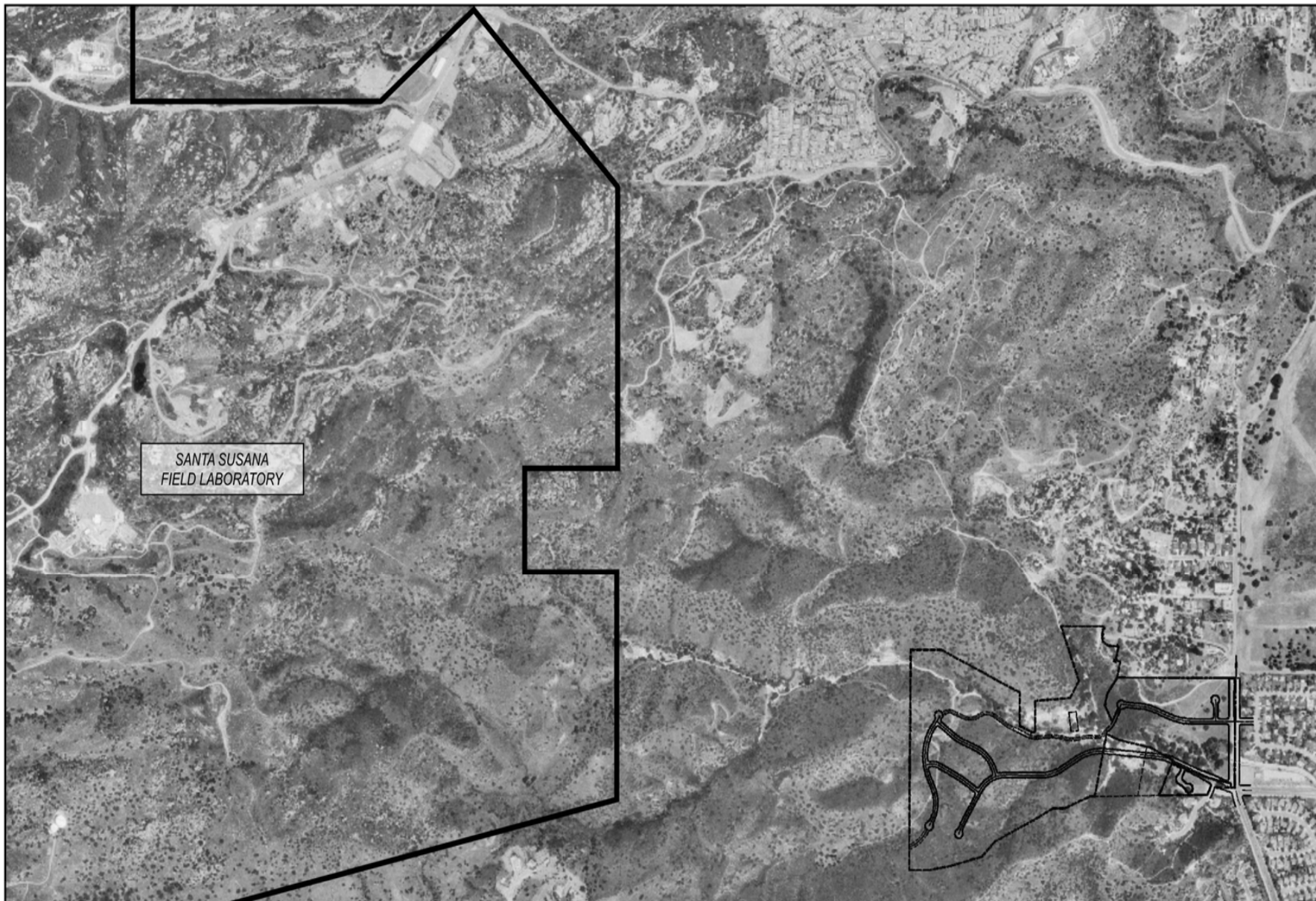
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Questions?



SSFL AND STERLING PROPERTY